



# Slim Line Power Supplies PS5R-S

## Features

- Lightweight and Compact in size
- Wide Power Range: 15W – 240W
- Universal Input:
  - 15W to 90W: 85-264V AC/100-370V DC
  - 120W and 240W: 85-264V AC/100-350V DC
- Power Factor Correction (EN61000-3-2) for 60W to 240W
- Meets SEMI F47 Sag Immunity (120W & 240W)
- NEC Class 2 rated (15W, 30W & 60W)
- Approved for Class 1, Div. 2 Hazardous Locations
- Fused input
- Overcurrent protection, auto-reset
- Overvoltage protection, shut down
- Spring-up Screw Terminal type, IP20
- DIN rail or Panel Surface Mount
- Approvals:
  - CE Marked, TÜV, c-UL, UL 508, UL 1310 (PS5R-SB, -SC, -SD), UL 1604, EN 50178:1997, LVD: EN60950:2000, EMC: Directive, EN61204-3:2000 (EMI: Class B, EMS: Industrial)



For more information on these and other IDEC power supplies, visit:  
[www.idec.com/powersupply](http://www.idec.com/powersupply)

## Specifications

Part Numbers	5V DC output	PS5R-SB05	–	–	–	–	–	
	12V DC output	PS5R-SB12	PS5R-SC12	–	–	–	–	
	24V DC output	PS5R-SB24	PS5R-SC24	PS5R-SD24	PS5R-SE24	PS5R-SF24	PS5R-SG24	
Output Capacity		15W (5V Model is 10W)	30W	60W	90W	120W	240W	
Input	Input Voltage (single-phase, 2-wire)	85 to 264 VAC, 100 to 370 VDC				85 to 264V AC, 100 to 350V DC		
	Input Current (maximum)	100VAC	0.45A	0.9A	1.7A	2.3A	1.8A	3.5A
		200VAC	0.3A	0.6A	1.0A	1.4A	1.0A	1.7A
	Internal Fuse Rating	2A	3.15A	3.15A	4A	4A	4A	6.3A
	Inrush Current (cold start)	50A maximum (at 200V AC)						
	Leakage Current (at no load)	132V AC: 0.38 mA maximum 264V AC: 0.75 mA maximum		0.75mA maximum			1mA maximum	
Typical Efficiency	5V DC	69%	–	–	–	–	–	
	12V DC	75%	78%	–	–	–	–	
	24V DC	79%	80%	83%	82%	84%	–	
Output Current Ratings	5V DC	2.0A	–	–	–	–	–	
	12V DC	1.2A	2.5A	–	–	–	–	
	24V DC	0.65A	1.3A	2.5A	3.75A	5A	10A	
Voltage Adjustment	±10% (V. ADJ control on front)							
Output Holding Time	20ms minimum (at rated input and output)							
Starting Time	200ms maximum	–	–	–	–	650ms maximum	500ms maximum	
Rise Time	100ms maximum (at rated input and output)				200ms maximum			
Line Regulation	0.4% maximum							
Load Regulation	1.5% maximum					0.8% max		
Temperature Regulation	0.05% degree C maximum							
Ripple Voltage	2% peak to peak maximum (including noise)					1% peak to peak maximum (including noise)		
Overcurrent Protection	105% or more, auto reset			105 to 130%, auto reset		103 to 110%, auto reset		
Overvoltage Protection	120% min. SHUTDOWN							
Operation Indicator	LED (green)							
Voltage Low Indication	LED (amber)	–	–	–	–	LED (amber)		

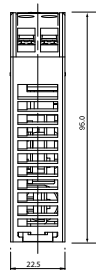
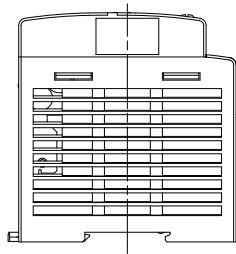
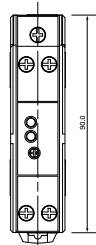
# Specifications Con't

	PS5R-SB	PS5R-SC	PS5R-SD	PS5R-SE	PS5R-SF	PS5R-SG	
Parallel Operation	No						
Dielectric Strength	Between Input and Ground: 2000 VAC, 1 minute*						
Insulation Resistance	Between Input & Output Terminals: 100 MΩ Min						
Operating Temperature	-10 to +65°C (14 to 149°F)					-10 to 60°C (14 to 140°F)	
Storage Temperature	-25 to 75°C (-13 to +167°F)						
Operating Humidity	20 to 90% relative humidity (no condensation)						
Vibration Resistance	Frequency 10 to 55Hz, Amplitude 0.375mm						
Shock Resistance	300m/s <sup>2</sup> (30G) 3 times each in 6 axes						
Approvals	EMC: EN61204-3 (EMI: Class B, EMS: Industrial), c-UL (CSA 22.2 No. 14), UL 1604, UL 508, LVD: EN60950, EN50178						
	UL1310 Class 2, c-UL (CSA 22.2 No. 213 and 223)			-		SEMI F47	
Harmonic Directive	N/A			EN61000-3-2 A14 class A			
Weight (approx.)	160g	250g	285g	440g	630g	1000g	
Terminal Screw	M3.5 slotted-Phillips head screw (screw terminal type)						
IP protection	IP20 fingersafe						
Dimensions H x W x D (mm)	90 x 22.5 x 95	95 x 36 x 108		115 x 46 x 121	115 x 50 x 129	125 x 80 x 149.5	
Dimensions H x W x D (inches)	3.54 x 0.89 x 3.74	3.74 x 1.42 x 4.25		4.53 x 1.81 x 4.76	4.53 x 1.97 x 5.08	4.92 x 3.15 x 5.89	

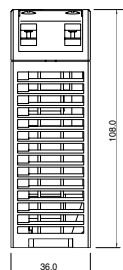
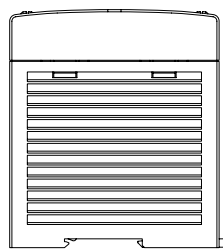
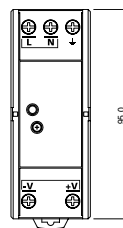
\* Between input and output: 3000VAC, 1 minute; Between output and ground: 500VAC, 1 minute

## Dimensions

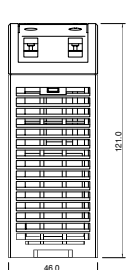
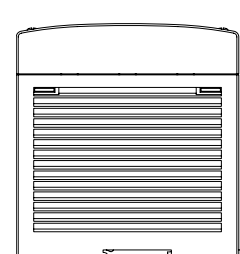
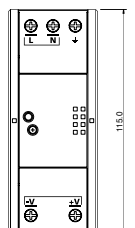
PS5R-SB



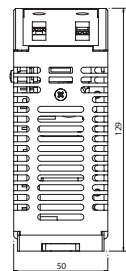
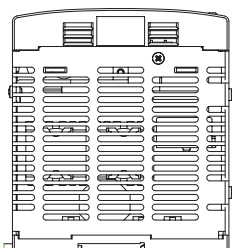
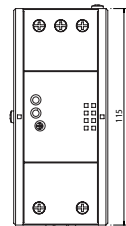
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PS5R-SD



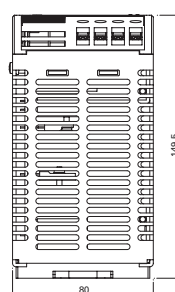
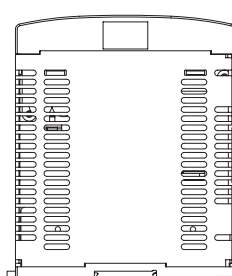
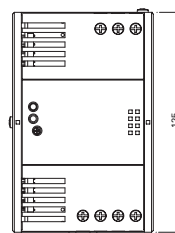
PS5R-SE



PS5R-SF



PS5R-SG



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